

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An on-vehicle picture data transmission system to which a plurality of picture sources are connected, ~~via~~ and including a vehicle-inside communication line, comprising:

a plurality of picture transmitting apparatuses, each of the plurality of picture transmitting apparatus including,

an input unit for inputting a picture signal from the plurality of picture sources,

a data converter for converting the picture signal from the input unit into picture data having a predetermined transfer rate,

a transmission unit for transmitting the picture data converted by the data converter to the vehicle-inside communication line, and

a rate controller for controlling the data converter to control the transfer rate;

a plurality of picture receiving apparatus, each of the plurality of picture receiving apparatus including,

a reception unit for receiving the picture data transmitted from the picture transmitting unit via the vehicle-inside communication line,

a data converter for converting the picture data from the reception unit into a picture signal,

an output unit for outputting the picture signal converted by the data converter, and

a line management unit for outputting a control signal to the rate controller, the control signal designating the transfer rate of the picture data transferred via the vehicle-inside communication line; and

a provision unit for providing information, ~~which~~ based on the picture signal from the output unit of the picture receiving apparatus ~~represents, with a user in the vehicle,~~

wherein the line management unit outputs to the rate controller, a control signal capable of controlling the transfer rate of the picture data from each of the picture transmitting apparatus to the vehicle-inside communication line, based upon transfer capacity information indicative of a transfer capacity of the vehicle-inside communication line and transfer rate information indicative of a transfer rate used in the vehicle-inside communication line, and

wherein the rate controller controls the data converter so that the transfer rate at which the picture data is transmitted by the transmission unit is controlled based upon the control signal for controlling the transfer rate from the line management unit.

2. (currently amended): The on-vehicle picture data transmission system according to claim 1, wherein

~~the at least one of said plurality of picture sources~~ is constituted by a rear monitoring camera apparatus for monitoring a rear-sight of the vehicle, and

the line management unit controls a transfer rate of picture data transmitted from the rear monitoring camera apparatus and a transfer rate of picture data transmitted from another picture transmitting apparatus via the vehicle-inside communication line so that the provision unit provides the information of the picture data imaged by the back-sight monitoring camera apparatus based upon a back gear signal produced when the user sets a back gear.

3. (currently amended): An on-vehicle picture data receiving apparatus for receiving picture data via a vehicle-inside communication line from a plurality of picture transmitting apparatus which converts picture signal from a picture source into ~~the~~said picture data having a transfer rate used when the picture data is transmitted via the vehicle-inside communication line, the on-vehicle picture data receiving apparatus comprising:

a reception unit for receiving the picture data transmitted from each of the picture transmitting apparatus via the vehicle-inside communication line;

a data converter for converting the picture data received by the reception unit into a picture signal;

an output unit for outputting the picture signal converted by the data converter to provide contents of the picture signal to a user in a vehicle; and

a line management unit for outputting to the picture transmitting apparatus, a control signal for designating a transfer rate of the picture data transferred via the vehicle-inside communication line,

wherein the line management unit controls the transfer rate of picture data from each of the picture transmitting apparatus via the vehicle-inside communication line, based upon

transfer capacity information indicative of a transfer capacity of the vehicle-inside communication line and transfer rate information indicative of a transfer rate used in the vehicle-inside communication line.

4. (currently amended): The on-vehicle picture data receiving apparatus according to claim 3, wherein

at least one of said plurality of the picture sources is constituted by a rear monitoring camera apparatus for monitoring a rear-sight of the vehicle, and

the line management unit controls a transfer rate of picture data transmitted from the rear monitoring camera apparatus to the vehicle-inside communication line and a transfer rate of picture data transmitted from another picture transmitting apparatus so that the provision unit provides the information of the picture data imaged by the back-sight monitoring camera apparatus when a back gear signal is produced when the user sets a back gear.

5-11. (canceled).

12. (new): An on-vehicle data transmission system comprising:

a plurality of picture sources;

at least one reception terminal for providing information based on said plurality of picture sources;

a communication line for transferring signals from said plurality of picture sources to said at least one reception terminal;

wherein a transfer rate of said signals is controlled based upon a transfer capacity of said communication line and a transfer rate used in said communication line.

13. (new): The on-vehicle data transmission system according to claim 12, further comprising:

a plurality of picture transmitting apparatus;

a plurality of picture receiving apparatus;

wherein said plurality of picture transmitting apparatus receive analog picture signals from said picture sources, convert said analog picture signals to digital picture data, and transmit said digital picture data to said plurality of picture receiving apparatus via said communication line;

wherein said plurality of picture receiving apparatus receive said digital picture data from said plurality of picture transmitting apparatus, convert said digital picture data to analog output picture signals, and output said analog output picture signals to said reception terminal.

14. (new): The on-vehicle data transmission system according to claim 13, wherein said control of said transfer rate is accomplished by controlling the transfer rate between said plurality of picture transmitting apparatus and said plurality of picture receiving apparatus.